BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK:- Improvements to Roads and Drains in Varma Layout Amruthahalli in ward No. 7 Byatarayanpura, Kodigehalli sub division (Job code no : 007-16-000006)

							ESTIMATED COST		4500000.00
Sl No	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs	Amount in Rs
1	KSRRB M300-2: Earth work excavation by manual means in Ordinary Soil involving an average horizontal throw up to 2mts and an average lift up to 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications complete as per specifications. MORTH Chapter 3. (P.No.138, I.No.19.1 of PW,P&IWTD S.R 2014-15)								
	Varma Layout 3rd cross Drain	cum	2	290.00	0.75	0.60	261.00		
	3rd A cross		2	41.00	0.75	0.60	36.90		
	4th cross		2	150.00	0.75	0.60	135.00		
	4th A Cross		2	72.00	0.75	0.60	64.80		
	4th B Cross		2	72.00	0.75	0.60	64.80		
	4th C cross		2	72.00	0.75	0.60	64.80		
	Muniswamappa Layout 1st Cross		2	71.00	0.75	0.60	63.90		
	2nd Cross		2	208.00	0.75	0.60	187.20		
	CDS		3	7.00	1.80	0.75	28.35		
							906.75	**75.60**	**68550.00**
	Basic Rate Rs.	70.00							
	Add 8% A.W Rs.	5.60							
	Total Rate Rs.	75.60							
2	Removing BS Slab of drain and stacking.								
	(P.No.25, I.No.5.32 of PW,P&IWTD S.R 2014-15)								
	Varma Layout 3rd cross Drain	sqm	2	290.00	1.65		957.00		
	3rd A cross		2	41.00	1.65		135.30		
	4th cross		2	150.00	1.65		495.00		
	4th A Cross		2	72.00	1.65		237.60		
	4th B Cross		2	72.00	1.65		237.60		
	4th C cross		2	72.00	1.65		237.60		
	Muniswamappa Layout 1st Cross		2	71.00	1.65		234.30		
	2nd Cross		2	208.00	1.65		686.40		
							3220.80	**58.32**	**187837.00**
	Basic Rate Rs.	54.00							
	Add 8% A.W Rs.	4.32							
	Total Rate Rs.	58.32							
3	Refixing stone slabs of drains and pointing in CM 1:3.								
	(P.No.25, I.No. 5.33 of PW,P&IWTD S.R 2014-15)						Sqm		
		Qty Same as I.No.2 (90%)					2898.72		
							2898.72	**75.60**	**219143.00**
	Basic Rate Rs.	70.00							
	Add 8% A.W Rs.	5.60							
	Total Rate Rs.	75.60							

4	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. (7.50cms thick)								
	(P.No.25, I.No.5.31.1 of PW,P&IWTD SR 2014-15.)								
		Sqm							
			Qty Same as I.No.1 (10%)				**322.08**	**639.36**	**205925.00**
	Basic Rate Rs.	592.00							
	Add 8% A.W Rs.	47.36							
	Total Rate Rs.	639.36							
5	KSRB 4-1.2: Providing and laying in position plain cement concrete of I mix M10 With OPC cement @ 220 Kgs with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P. 12, I.No. 4.2) SR-2014-15								
	Varma Layout CDS	CUM	3	7.00	2.00	0.15	6.30		
							6.30	**5064.12**	**31904.00**
	Basic Rate	4689.00							
	Area Weightage @ 8%	375.12							
	Total	5064.12							
6	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 (P. 23, I.No. 5.6) SR-2014-15								
	Varma Layout CDS	CUM	6	7.00	0.60	0.60	15.12		
							15.12	**3836.16**	**58003.00**
	Basic Rate	3552.00							
	Area Weightage @ 8%	284.16							
	Total	3836.16							
7	KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons.Specification No. KBS 4.6.2 (P 15, I.No 4.28) SR-2014-15								
	Varma Layout CDS	sqm	6	7.00	0.23		9.66		
			6	2.00	0.23		2.76		
			3	7.00	0.60		12.60		
							25.02	**236.52**	**5918.00**
	Basic Rate	219.00							
	Area Weightage @ 8%	17.52							
	Total	236.52							
8	Providing and laying cement concrete using 20mm and down size granite jelly of ready mix concrete for RCC works laid in 15 cm thick layers and well compacted including vibrating curing etc., including smooth finish in CM 1:3, with all lead and lift etc., complete. (exculsive of cost of steel, fabrication and plastering charges)Ready mixed Cement concrete for Beams, Columns, Staircase and Roof with M-20 (1:1.5:3) (Cement-3320Kg/cum) (P. 18, I.No. 4.49.1) SR-2014-15								
	Varma Layout CDS	CUM	3	7.00	2.00	0.23	9.66		
							9.66	**5847.12**	**56483.00**
	Basic Rate	5414.00							
	Area Weightage @ 8%	433.12							
	Total	5847.12							

9	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. (P. 17, I.No. 4.46) SR-2014-15								
	Varma Layout CDS	CUM	3	7.00	2.00	0.23	9.66		
							9.66		
	9.66x80Kg/Cum						772.80		
							0.77	**78351.84**	**60550.00**
	Basic Rate	72548							
	Area Weightage @ 8%	5803.84							
	Total	78351.84							
10	KSRRB M300. Construction of Embakment with material Grave /murrum. Construction of Embakment with approved material gravel/murrum with all lifts and leads, transporting to site, spreading grading to requiered slope and compacting to meet requirement Table 300-2 complete as per specificcation (Which include cost of gravel / murrum watering charges & compaction by vibratory roller) MORTH Specification no 305 (pg no 144, item no 19.60) 14-15								
	4TH B cross	cum	1	50.00	5.80	0.30	87.00		
							87.00	**220.32**	**19168.00**
	Basic Rate Rs.	204.00							
	Add 8% A.W Rs.	16.32							
	Total Rate Rs.	220.32							
11	KSRRB M300-52.1. Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material within all lifts and leads upto 1000 metres complete as per specifications.MORTH Specification No. 305.4.3 (P-144, Item No. 19.58 SR 2014-15)								
	Varma Layout 3rd cross Drain	Sqm	1	290.00	7.00		2030.00		
	3rd A cross		1	41.00	6.00		246.00		
	4th cross		1	150.00	7.00		1050.00		
	4th A Cross		1	72.00	6.00		432.00		
	4th B Cross		1	72.00	6.00		432.00		
	4th C cross		1	72.00	6.00		432.00		
	Muniswamappa Layout 1st Cross		1	71.00	7.00		497.00		
	2nd Cross		1	208.00	5.80		1206.40		
							6325.40	**18.36**	**116134.00**
	Basic Rate Rs.	17.00							
	Add 8% A.W Rs.	1.36							
	Total Rate Rs.	18.36							
12	KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. (145, I.No. 19.64)14-15								
	Varma Layout 3rd cross Drain	Sqm	1	290.00	7.00		2030.00		
	3rd A cross		1	41.00	6.00		246.00		
	4th cross		1	150.00	7.00		1050.00		
	4th A Cross		1	72.00	6.00		432.00		
	4th B Cross		1	72.00	6.00		432.00		
	4th C cross		1	72.00	6.00		432.00		
	Muniswamappa Layout 1st Cross		1	71.00	7.00		497.00		
	2nd Cross		1	208.00	5.80		1206.40		
							6325.40	**4.48**	**28350.00**
	Basic Rate	4.15							
	Area Weightage @ 8%	0.33							
	Total	4.48							

13	KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. (P. 154 Item No. 20.18)14-15								
	Varma Layout 3rd cross Drain	CUM	1	290.00	7.00	0.15	304.50		
	3rd A cross		1	41.00	6.00	0.15	36.90		
	4th cross		1	150.00	7.00	0.15	157.50		
	4th A Cross		1	72.00	6.00	0.15	64.80		
	4th B Cross		1	72.00	6.00	0.15	64.80		
	4th C cross		1	72.00	6.00	0.15	64.80		
	Muniswamappa Layout 1st Cross		1	71.00	7.00	0.15	74.55		
	2nd Cross		1	208.00	5.80	0.15	180.96		
	Basic Rate Rs.	1332.00					**948.81**	**1438.56**	**1364920.00**
	Add 8% A.W Rs.	106.56							
	Total Rate Rs.	1438.56							
14	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. (P. 157, Item No. 21.6) 14-15								
	Varma Layout 3rd cross Drain	Sqm	1	290.00	7.00		2030.00		
	3rd A cross		1	41.00	6.00		246.00		
	4th cross		1	150.00	7.00		1050.00		
	4th A Cross		1	72.00	6.00		432.00		
	4th B Cross		1	72.00	6.00		432.00		
	4th C cross		1	72.00	6.00		432.00		
	Muniswamappa Layout 1st Cross		1	71.00	7.00		497.00		
	2nd Cross		1	208.00	5.80		1206.40		
							6325.40	**31.32**	**198112.00**
	Basic Rate Rs.	29.00							
	Add 8% A.W Rs.	2.32							
	Total Rate Rs.	31.32							
15	KSRRB M500-18. Providing and laying semi dense bituminous concrete25mm to 30mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.5 to 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.8 complete in all respects as per specifications. with 80/100 grade bitumen using 40-60 HMP using mechanical paver (P. 159, Item No. 21.20.2)14-15								
	Varma Layout 3rd cross Drain	CUM	1	290.00	7.00	0.03	60.90		
	3rd A cross		1	41.00	6.00	0.03	7.38		
	4th cross		1	150.00	7.00	0.03	31.50		
	4th A Cross		1	72.00	6.00	0.03	12.96		
	4th B Cross		1	72.00	6.00	0.03	12.96		
	4th C cross		1	72.00	6.00	0.03	12.96		
	Muniswamappa Layout 1st Cross		1	71.00	7.00	0.03	14.91		
	2nd Cross		1	208.00	5.80	0.03	36.19		
							189.76	**8475.84**	**1608392.00**
	Basic Rate Rs.	7848.00							
	Add 8% A.W Rs.	627.84							
	Total Rate Rs.	8475.84							

16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No. 178, Item No. 24.15) SR 2014-15								
	Varma Layout 3rd cross Drain	Sqm	2	290.00	0.10		58.00		
	3rd A cross		2	41.00	0.10		8.20		
	4th cross		2	150.00	0.10		30.00		
	4th A Cross		2	72.00	0.10		14.40		
	4th B Cross		2	72.00	0.10		14.40		
	4th C cross		2	72.00	0.10		14.40		
	Muniswamappa Layout 1st Cross		2	71.00	0.10		14.20		
	2nd Cross		2	208.00	0.10		41.60		
							195.20	**475.20**	**92759.00**
	Basic Rate Rs.	440.00							
	Add 8% A.W Rs.	35.20							
	Total Rate Rs.	475.20							
17	Lead for Disposal of Debris shall be payable at carage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 5.00 Km (Page No.141)								
	Basic rate for haulage of materials as per item no.17.4 page 141) Rs. 2.00			Cum					
	Average weight of earth 1.28		Qty vide Item No.1			--	**906.75**	**140.03**	**126968.00**
	Basic Tate Lead Charges upto 2.00 Kms	62.20							
	2x1.28x2 =	5.12							
	Loading and unloading	67.32							
	Average Weight of earth 1.28 tone/kg for	5.39							
		72.71							
	Sub Total								**4449116.00**
18	Third party inspection								**44491.00**
19	Miscelleneous & Rounding off								**6393.00**
								Toatl Rs.	**4500000.00**
	(Rupees:- Forty Five Lakhs Only)								

CERTIFICATE:

1 **The work spot has been inspected me and the work is found to be necessary.**
2 **The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2014-2015.**
3 **The Provisions made in the estimate are quite necessary and adequate.**
4 **The area comes with in the BBMP limits.**

Junior Engineer
Ward No. 07

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

ADMINISTRATIVELY SANCTIONED FOR Rs 45.00 lakh
Rupees Forty Five Lakhs only
Under P-3089

Registered as EE ( ) No 9....9....
Subject to conditions contained in enclosed memo EE ( ) No /9/....
Dt Estimate A/Sanctioned
No 2015-16
dated 20/8/2015 Rs 45.00 lakhs

Joint Commissioner

Technical Sanction
Accorded For 45.00 lakh Rs.
Head of A/C P3089
CER NO : 32 **Dt:** 21.8.15

TA

CE (YNK)